

# **SCHOTTKY BARRIER DIODE**

#### Applications

Low current rectification and high speed switching

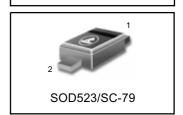
#### Features

Extremelysmall surface mounting type. (SC-79/SOD523)  $I_0$ =200mA guaranteed despite the size. Low V<sub>F</sub>.(V<sub>F</sub>=0.40V Typ. At 200mA)

#### Construction

silicon epitaxial planar

# LRB521S-30T1





#### **MAXIMUM RATINGS** $(T_A = 25^{\circ}C)$

Parameter	Symbol	Limits	Unit
DC reverse voltage	$V_R$	30	V
Mean rectifying current	lo	200	mA
Peak forward surge current*	I <sub>FSM</sub>	1	Α
Junction temperature	Tj	125	°C
Storage temperature	T <sub>stg</sub>	-40~+125	°C

\*60Hz for 1  $\,\hookrightarrow$ 

#### **DEVICE MARKING**

LRB521S-30T1=5M

#### **ELECTRICAL CHARACTERISTICS(TA=25°C)**

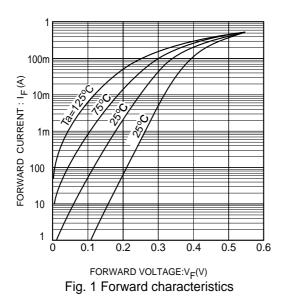
Parameter	Symbol	Min.	Тур	Max.	Unit	Conditions
Forward voltage	$V_{_{F}}$	-	-	0.50	V	I <sub>F</sub> =200mA
Reverse current	l <sub>R</sub>	-	-	30	μΑ	V <sub>R</sub> =10V





### LRB521S-30T1

### Electrical characteristic curves(Ta=25°C)



10m Ta=125°C

1m 75°C

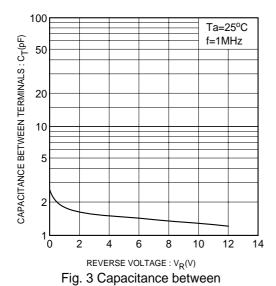
25°C

100n 25°C

100n 25°C

REVERSE VOLTAGE:V<sub>R</sub>(V)

Fig. 2 Reverse characteristics



terminals characteristics

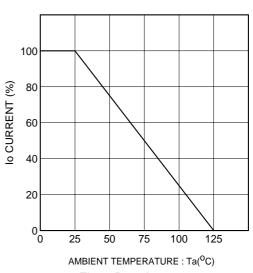
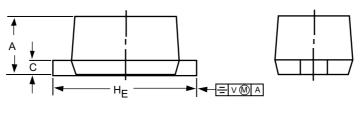


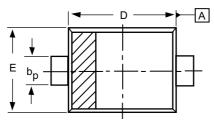
Fig. 4 Derating curve (mounting on glass epoxy PCBs)

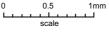


## LRB521S-30T1

## SC-79/SOD-523







## **DIMENSIONS** (mm are the original dimensions)

UNIT	Α	b <sub>p</sub>	С	D	Е	ΗE	٧
m m	0.7	0.35	0.2	1.3	0.9	1.7	0.15
	0.5	0.25	0.1	1.1	0.7	1.5	

#### Note

1. The marking bar indicates the cathode.

OUTLINE	REFERENCES			EUROPEAN	ISSUE DATE
VERSION	IEC	JEDEC	EIAJ	PROJECTIO	
SOD523			SC-79	- <del>-</del> - <del>-</del> -	98-11-25